



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0191; Directorate Identifier 2013-NM-256-AD; Amendment 39-18030; AD 2014-23-14]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc. Model DHC-8-400 series airplanes. This AD was prompted by reports of swing arm assemblies of engine fuel feed ejector pumps detaching from the outlet port of the engine fuel feed ejector pump and partially blocking the engine fuel feed line. This AD requires installing a restrictor into the engine fuel feed line. We are issuing this AD to prevent blocked engine fuel flow and possible engine flameout.

DATES: This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may examine the AD docket on the Internet at

<http://www.regulations.gov/#!documentDetail;D=FAA-2014-0191> or in person at the Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

For service information identified in this AD, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; email thd.qseries@aero.bombardier.com; Internet <http://www.bombardier.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

FOR FURTHER INFORMATION CONTACT: Morton Lee, Propulsion Engineer, Propulsion & Services Branch, ANE-173, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7355; fax 516-794-5531.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Bombardier, Inc. Model DHC-8-400 series airplanes. The NPRM published in the Federal Register on April 9, 2014 (79 FR 19546).

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2013-35, dated November 15, 2013 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Bombardier, Inc. Model DHC-8-400 series airplanes. The MCAI states:

There have been incidents of the “ENG FUEL PRESS” caution light illuminating in-flight. An investigation revealed the engine fuel feed ejector pump swing arm assembly became detached from the outlet port of the engine fuel feed ejector pump and partially blocked the engine fuel feed line. If the failed swing arm assembly migrates along the fuel line downstream of the Fuel Tank AUX Pump junction, it could block the engine fuel flow and the affected engine may experience a flameout condition.

Bombardier issued Service Bulletin (SB) 84-28-16 to introduce a restrictor into the engine fuel feed line that is designed to contain a detached ejector pump swing arm assembly.

This [Canadian] AD mandates the installation of a restrictor into the engine fuel feed line to prevent possible engine flameout.

You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov/#!documentDetail;D=FAA-2014-0191-0002>.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM (79 FR 19546, April 9, 2014) and the FAA’s response to each comment.

Request to Require Compliance with Relevant Instructions in Service Information

Horizon Air asked that we revise the NPRM (79 FR 19546, April 9, 2014) to specify only those instructions required to correct the unsafe condition. Horizon Air explained that paragraph (g) of the NPRM is more restrictive than necessary to ensure safety of flight, and that the Accomplishment Instructions of Bombardier Service Bulletin 84-28-16, Revision B, dated June 17, 2013, should not be mandated in its entirety. Horizon Air stated that the job set-up and close-out sections of the Accomplishment Instructions do not directly correct the unsafe condition; incorporating those sections as a requirement of the AD restricts an operator's ability to perform other maintenance, in conjunction with incorporation of the instructions in the service information.

We agree to refer only to the procedures that address the identified unsafe condition. We have revised paragraph (g) of this AD to refer paragraph 3.B., "Procedure," of the Accomplishment Instructions of Bombardier Service Bulletin 84-28-16, Revision B, dated June 17, 2013.

Request to Remove Repair Approval Language

Horizon Air asked that we remove the "Airworthy Product" language in paragraph (i)(2) of the NPRM (79 FR 19546, April 9, 2014), which states, in part, "For a repair method to be approved, the repair approval must specifically refer to this AD." Horizon Air stated that this sentence should not be included in the final rule, or at the very least it should be modified, because it will place an unnecessary regulatory burden on operators with airplanes built in Canada. Horizon Air added that Transport Canada Civil Aviation is the State holding design authority for Bombardier Model DHC-8-400

series airplanes; the NPRM simply restates the requirements of the TCCA AD. Horizon Air noted that any repairs created by Bombardier would have to be in compliance with the TCAA AD, and the repair would specifically refer to the TCCA AD. Horizon Air also stated that the bilateral agreement between Canada and the United States accepts documents approved by TCAA as meeting the requirements for FAA approval. Horizon Air does not see the need for referencing the U.S. AD number when the repair is approved by TCCA and refers to the Canadian AD; therefore, the repair meets the approval requirements from the State holding the Design Authority. Horizon Air concluded that if this requirement is retained, it would force operators to go back to the manufacturer and request a revision to the repair method to add the U.S. AD number, even if the repair method is referenced in the TCCA AD.

We concur with the commenter's request to remove the requirement to refer to this AD in repair approvals. Since late 2006, we have included the paragraph titled "Airworthy Product" in all MCAI ADs in which the FAA develops an AD based on a foreign authority's AD. The MCAI or referenced service information in an FAA AD often directs the owner/operator to contact the manufacturer for corrective actions, such as a repair. Briefly, the Airworthy Product paragraph allowed owners/operators to use corrective actions provided by the manufacturer if those actions were FAA-approved. In addition, the paragraph stated that any actions approved by the State of Design Authority (or its delegated agent) are considered to be FAA-approved.

In the NPRM (79 FR 19546, April 9, 2014), we proposed to prevent the use of repairs that were not specifically developed to correct the unsafe condition, by requiring

that the repair approval provided by the State of Design Authority or its delegated agent specifically refer to this FAA AD. This change was intended to clarify the method of compliance and to provide operators with better visibility of repairs that are specifically developed and approved to correct the unsafe condition. In addition, we proposed to change the phrase “its delegated agent” to include a design approval holder (DAH) with State of Design Authority design organization approval (DOA), as applicable, to refer to a DAH authorized to approve required repairs for the proposed AD.

In addition to Horizon Air’s comments to the NPRM (79 FR 19546, April 9, 2014) about these proposed changes, a comment was provided for an NPRM having Directorate Identifier 2012-NM-101-AD (78 FR 78285, December 26, 2013). The commenter stated the following: “The proposed wording, being specific to repairs, eliminates the interpretation that Airbus messages are acceptable for approving minor deviations (corrective actions) needed during accomplishment of an AD mandated Airbus service bulletin.”

This comment has made the FAA aware that some operators have misunderstood or misinterpreted the Airworthy Product paragraph to allow the owner/operator to use messages provided by the manufacturer as approval of deviations during the accomplishment of an AD-mandated action. The Airworthy Product paragraph does not approve messages or other information provided by the manufacturer for deviations to the requirements of the AD-mandated actions. The Airworthy Product paragraph only addresses the requirement to contact the manufacturer for corrective actions for the identified unsafe condition and does not cover deviations from other AD requirements.

However, deviations to AD-required actions are addressed in 14 CFR 39.17, and anyone may request the approval for an alternative method of compliance to the AD-required actions using the procedures found in 14 CFR 39.19.

To address this misunderstanding and misinterpretation of the Airworthy Product paragraph, we have changed the paragraph and retitled it “Contacting the Manufacturer.” This paragraph now clarifies that for any requirement in this AD to obtain corrective actions from a manufacturer, the actions must be accomplished using a method approved by the FAA, TCCA, or Bombardier, Inc.’s TCCA Design Approval Organization (DAO).

The Contacting the Manufacturer paragraph also clarifies that, if approved by the DAO, the approval must include the DAO-authorized signature. The DAO signature indicates that the data and information contained in the document are TCCA-approved, which is also FAA-approved. Messages and other information provided by the manufacturer that does not contain the DAO-authorized signature approval are not TCCA-approved, unless TCCA directly approves the manufacturer’s message or other information.

This clarification does not remove flexibility previously afforded by the Airworthy Product paragraph. Consistent with long-standing FAA policy, such flexibility was never intended for required actions. This is also consistent with the recommendation of the Airworthiness Directive Implementation Aviation Rulemaking Committee to increase flexibility in complying with ADs by identifying those actions in manufacturers’ service instructions that are “Required for Compliance” with ADs. We continue to work with manufacturers to implement this recommendation. But once we determine that an

action is required, any deviation from the requirement must be approved as an alternative method of compliance.

Other commenters to the NPRM having Directorate Identifier 2012-NM-101-AD (78 FR 78285, December 26, 2013) pointed out that in many cases the foreign manufacturer's service bulletin and the foreign authority's MCAI might have been issued some time before the FAA AD. Therefore, the DOA might have provided U.S. operators with an approved repair, developed with full awareness of the unsafe condition, before the FAA AD is issued. Under these circumstances, to comply with the FAA AD, the operator would be required to go back to the manufacturer's DOA and obtain a new approval document, adding time and expense to the compliance process with no safety benefit.

Based on these comments, we removed the requirement that the DAH-provided repair specifically refer to this AD. Before adopting such a requirement, the FAA will coordinate with affected DAHs and verify they are prepared to implement means to ensure that their repair approvals consider the unsafe condition addressed in this AD. Any such requirements will be adopted through the normal AD rulemaking process, including notice-and-comment procedures, when appropriate.

We also have decided not to include a generic reference to either the "delegated agent" or "DAH with State of Design Authority design organization approval," but instead we have provided the specific delegation approval granted by the State of Design Authority for the DAH throughout this AD.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these changes:

- Are consistent with the intent that was proposed in the NPRM (79 FR 19546, April 9, 2014) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (79 FR 19546, April 9, 2014).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Costs of Compliance

We estimate that this AD affects 81 airplanes of U.S. registry. We estimate the following costs to comply with this AD.

We also estimate that it takes about 12 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts cost about \$0 per product. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$82,620, or \$1,020 per product.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's

authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Examining the AD Docket

You may examine the AD docket on the Internet at [http://www.regulations.gov/#!docketDetail;D= FAA-2014-0191](http://www.regulations.gov/#!docketDetail;D=FAA-2014-0191); or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2014-23-14 Bombardier, Inc.: Amendment 39-18030. Docket No. FAA-2014-0191; Directorate Identifier 2013-NM-256-AD.

(a) Effective Date

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc. Model DHC-8-400, -401, and -402 airplanes; certificated in any category; serial numbers 4001, and 4003 through 4417 inclusive, with installed engine fuel feed ejector pump having part number (P/N) 2960008-102.

(d) Subject

Air Transport Association (ATA) of America Code 28, Fuel.

(e) Reason

This AD was prompted by reports of swing arm assemblies of engine fuel feed ejector pumps detaching from the outlet port of the engine fuel feed ejector pump and partially blocking the engine fuel feed line. We are issuing this AD to prevent blocked engine fuel flow and possible engine flameout.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Installation

Within 6,000 flight hours or 36 months, whichever occurs first, after the effective date of this AD, install a restrictor into the engine fuel feed line, in accordance with

paragraph 3.B., “Procedure,” of the Accomplishment Instructions of Bombardier Service Bulletin 84-28-16, Revision B, dated June 17, 2013.

(h) Credit for Previous Actions

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 84-28-16, dated July 16, 2012; or Bombardier Service Bulletin 84-28-16, Revision A, dated May 23, 2013; which are not incorporated by reference in this AD.

(i) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York ACO, ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO, ANE-170, Engine and Propeller Directorate,

FAA; or TCCA; or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(j) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2013-35, dated November 15, 2013, for related information.

This MCAI may be found in the AD docket on the Internet at

<http://www.regulations.gov/#!documentDetail;D=FAA-2014-0191-0002>.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (k)(3) and (k)(4) of this AD.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Bombardier Service Bulletin 84-28-16, Revision B, dated June 17, 2013.

(ii) Reserved.

(3) For service information identified in this AD, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; email thd.qseries@aero.bombardier.com; Internet <http://www.bombardier.com>.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on November 6, 2014.

Jeffrey E. Duven
Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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